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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/783,338A

DATE: 12/18/2001

TIME: 16:37:40

Input Set : N:\Crif3\RULE60\09783338A.raw

Output Set: N:\CRF3\12182001\I783338A.raw

SEQUENCE LISTING

3 (1) GENERAL INFORMATION:  
5 (i) APPLICANT: Glazer, Peter M.  
6 Havre, Pamela A.  
8 (ii) TITLE OF INVENTION: Chemically Modified Oligonucleotide for  
9 Site-Directed Mutagenesis  
11 (iii) NUMBER OF SEQUENCES: 13  
13 (iv) CORRESPONDENCE ADDRESS:  
14 (A) ADDRESSEE: Patrea L. Pabst  
15 (B) STREET: 1100 Peachtree Street, Suite 2800  
16 (C) CITY: Atlanta  
17 (D) STATE: Georgia  
18 (E) COUNTRY: USA  
19 (F) ZIP: 30309-4530  
21 (v) COMPUTER READABLE FORM:  
22 (A) MEDIUM TYPE: Floppy disk  
23 (B) COMPUTER: IBM PC compatible  
24 (C) OPERATING SYSTEM: PC-DOS/MS-DOS  
25 (D) SOFTWARE: PatentIn Release #1.0, Version #1.25  
27 (vi) CURRENT APPLICATION DATA:  
C--> 28 (A) APPLICATION NUMBER: US/09/783,338A  
C--> 29 (B) FILING DATE: 14-Feb-2001  
30 (C) CLASSIFICATION:  
32 (vii) PRIOR APPLICATION DATA:  
33 (A) APPLICATION NUMBER: 08/083,088  
34 (B) FILING DATE: 25-JUN-1993  
37 (viii) ATTORNEY/AGENT INFORMATION:  
38 (A) NAME: Pabst, Patrea L.  
39 (B) REGISTRATION NUMBER: 31,284  
40 (C) REFERENCE/DOCKET NUMBER: YU109  
43 (ix) TELECOMMUNICATION INFORMATION:  
44 (A) TELEPHONE: (404)-815-6508  
45 (B) TELEFAX: (404)-815-6555  
47 (2) INFORMATION FOR SEQ ID NO: 1:  
49 (i) SEQUENCE CHARACTERISTICS:  
50 (A) LENGTH: 11 base pairs  
51 (B) TYPE: nucleic acid  
52 (C) STRANDEDNESS: single  
53 (D) TOPOLOGY: linear  
55 (ii) MOLECULE TYPE: DNA (genomic)  
57 (iii) HYPOTHETICAL: NO  
59 (iv) ANTI-SENSE: NO  
61 (ix) FEATURE:  
62 (A) NAME/KEY: misc\_feature  
63 (B) LOCATION: 1..11  
64 (D) OTHER INFORMATION: /function= "N is  
65 4'-hydroxymethyl-4,5',8-trimethylpsoralen"

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67 (x) PUBLICATION INFORMATION:  
68 (A) AUTHORS: Glazer, Peter M.  
69 Havre, Pamela A.  
70 (K) RELEVANT RESIDUES IN SEQ ID NO:1: FROM 1 TO 11  
72 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:  
74 NAGGAAGGGG G  
80 (2) INFORMATION FOR SEQ ID NO: 2:  
82 (i) SEQUENCE CHARACTERISTICS:  
83 (A) LENGTH: 10 base pairs  
84 (B) TYPE: nucleic acid  
85 (C) STRANDEDNESS: single  
86 (D) TOPOLOGY: linear  
88 (ii) MOLECULE TYPE: DNA (genomic)  
90 (iii) HYPOTHETICAL: NO  
92 (iv) ANTI-SENSE: NO  
94 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:  
96 AGGAAGGGGG  
98 (2) INFORMATION FOR SEQ ID NO: 3:  
100 (i) SEQUENCE CHARACTERISTICS:  
101 (A) LENGTH: 10 base pairs  
102 (B) TYPE: nucleic acid  
103 (C) STRANDEDNESS: single  
104 (D) TOPOLOGY: linear  
106 (ii) MOLECULE TYPE: DNA (genomic)  
108 (iii) HYPOTHETICAL: NO  
110 (iv) ANTI-SENSE: NO  
112 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:  
114 GGGGGAAGGA  
117 (2) INFORMATION FOR SEQ ID NO: 4:  
119 (i) SEQUENCE CHARACTERISTICS:  
120 (A) LENGTH: 8 base pairs  
121 (B) TYPE: nucleic acid  
122 (C) STRANDEDNESS: single  
123 (D) TOPOLOGY: linear  
125 (ii) MOLECULE TYPE: DNA (genomic)  
127 (iii) HYPOTHETICAL: NO  
129 (iv) ANTI-SENSE: NO  
131 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:  
133 CCCCCTTC  
135 (2) INFORMATION FOR SEQ ID NO: 5:  
137 (i) SEQUENCE CHARACTERISTICS:  
138 (A) LENGTH: 11 base pairs  
139 (B) TYPE: nucleic acid  
140 (C) STRANDEDNESS: single  
141 (D) TOPOLOGY: linear  
143 (ii) MOLECULE TYPE: DNA (genomic)  
145 (iii) HYPOTHETICAL: NO  
147 (iv) ANTI-SENSE: NO  
149 (ix) FEATURE:

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150      (A) NAME/KEY: misc_feature
151      (B) LOCATION: 1..11
152      (D) OTHER INFORMATION: /function= "N is
153 4'-hydroxymethyl-4,5',8-trimethylpsoralen"
155      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
157 NGGGGGAAGG A                                     11
159 (2) INFORMATION FOR SEQ ID NO: 6:
161      (i) SEQUENCE CHARACTERISTICS:
162          (A) LENGTH: 18 base pairs
163          (B) TYPE: nucleic acid
164          (C) STRANDEDNESS: single
165          (D) TOPOLOGY: linear
167      (ii) MOLECULE TYPE: DNA (genomic)
169      (iii) HYPOTHETICAL: NO
171      (iv) ANTI-SENSE: NO
173      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
175 GGTTCGAATC CTTCCCCC                             18
177 (2) INFORMATION FOR SEQ ID NO: 7:
179      (i) SEQUENCE CHARACTERISTICS:
180          (A) LENGTH: 18 base pairs
181          (B) TYPE: nucleic acid
182          (C) STRANDEDNESS: single
183          (D) TOPOLOGY: linear
185      (ii) MOLECULE TYPE: DNA (genomic)
187      (iii) HYPOTHETICAL: NO
189      (iv) ANTI-SENSE: NO
193      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
195 GGTTCGAAAC CTTCCCCC                             18
197 (2) INFORMATION FOR SEQ ID NO: 8:
199      (i) SEQUENCE CHARACTERISTICS:
200          (A) LENGTH: 35 base pairs
201          (B) TYPE: nucleic acid
202          (C) STRANDEDNESS: single
203          (D) TOPOLOGY: linear
205      (ii) MOLECULE TYPE: DNA (genomic)
207      (iii) HYPOTHETICAL: NO
209      (iv) ANTI-SENSE: NO
211      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
213 TGGTGGTGGG GGAAGGATTC GAACCTTCGA AGTCG         35
215 (2) INFORMATION FOR SEQ ID NO: 9:
217      (i) SEQUENCE CHARACTERISTICS:
218          (A) LENGTH: 35 base pairs
219          (B) TYPE: nucleic acid
220          (C) STRANDEDNESS: single
221          (D) TOPOLOGY: linear
223      (ii) MOLECULE TYPE: DNA (genomic)
225      (iii) HYPOTHETICAL: NO
227      (iv) ANTI-SENSE: NO
231      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:

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DATE: 12/18/2001

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Input Set : N:\Crif3\RULE60\09783338A.raw

Output Set: N:\CRF3\12182001\I783338A.raw

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233 CGACTTCGAA GGTTCGAATC CTTCCCCCAC CACCA
235 (2) INFORMATION FOR SEQ ID NO: 10:
237     (i) SEQUENCE CHARACTERISTICS:
238         (A) LENGTH: 121 base pairs
239         (B) TYPE: nucleic acid
240         (C) STRANDEDNESS: single
241         (D) TOPOLOGY: linear
243     (ii) MOLECULE TYPE: DNA (genomic)
245     (iii) HYPOTHETICAL: NO
247     (iv) ANTI-SENSE: NO
249     (ix) FEATURE:
250         (A) NAME/KEY: misc_feature
251         (B) LOCATION: 1..60
252         (D) OTHER INFORMATION: /function= "At positions 16 and 57,
253 N is G or T."
255     (ix) FEATURE:
256         (A) NAME/KEY: misc_feature
257         (B) LOCATION: 1..121
258         (D) OTHER INFORMATION: /function= "At position 17, N is A,
259 G or T."
261     (ix) FEATURE:
262         (A) NAME/KEY: misc_feature
263         (B) LOCATION: 1..121
264         (D) OTHER INFORMATION: /function= "At position 18, N is A,
265 C or T."
268     (ix) FEATURE:
269         (A) NAME/KEY: misc_feature
270         (B) LOCATION: 1..121
271         (D) OTHER INFORMATION: /function= "At position 20, N is G
272 or A."
274     (ix) FEATURE:
275         (A) NAME/KEY: misc_feature
276         (B) LOCATION: 1..121
277         (D) OTHER INFORMATION: /function= "At position 24, N is C
278 or T."
280     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
282 TGGTGGTGGG GGAAGNNNTN GAANCTTCGA AGTCGATGAC GGCAGATTTA GAGTCTNCTC      60
284 CCTTTGGCCG CTCGGAACC CCACCACAGG TAATGCTTTT ACGGGGCGCA TCATATCAAA      120
286 T                                                                121
288 (2) INFORMATION FOR SEQ ID NO: 11:
290     (i) SEQUENCE CHARACTERISTICS:
291         (A) LENGTH: 121 base pairs
292         (B) TYPE: nucleic acid
293         (C) STRANDEDNESS: single
294         (D) TOPOLOGY: linear
296     (ii) MOLECULE TYPE: DNA (genomic)
298     (iii) HYPOTHETICAL: NO
300     (iv) ANTI-SENSE: NO
302     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:

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Input Set : N:\Crif3\RULE60\09783338A.raw

Output Set: N:\CRF3\12182001\I783338A.raw

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304 ATTTGATATG ATGCGCCCCG TAAAGCATT ACCTGTGGTG GGGTTCCCGA GCGGCCAAAG      60
306 GGAGCAGACT CTAAATCTGC CGTCATCGAC TTCGAAGGTT CGAATCCTTC CCCCACCACC      120
308 A                                                                           121
310 (2) INFORMATION FOR SEQ ID NO: 12:
312     (i) SEQUENCE CHARACTERISTICS:
313         (A) LENGTH: 121 base pairs
314         (B) TYPE: nucleic acid
315         (C) STRANDEDNESS: single
316         (D) TOPOLOGY: linear
318     (ii) MOLECULE TYPE: DNA (genomic)
320     (iii) HYPOTHETICAL: NO
322     (iv) ANTI-SENSE: NO
325     (ix) FEATURE:
326         (A) NAME/KEY: misc_feature
327         (B) LOCATION: 1..121
328         (D) OTHER INFORMATION: /function= "At position 7, N is G
329 or T."
331     (ix) FEATURE:
332         (A) NAME/KEY: misc_feature
333         (B) LOCATION: 1..121
334         (D) OTHER INFORMATION: /function= "At positions 12, 20 and
335 117, N is C or G."
337     (ix) FEATURE:
338         (A) NAME/KEY: misc_feature
339         (B) LOCATION: 1..121
340         (D) OTHER INFORMATION: /function= "At positions 15, 16,
341 21, 29, 78, 83 and 108, N is A or G."
342     (ix) FEATURE:
343         (A) NAME/KEY: misc_feature
344         (B) LOCATION: 1..121
345         (D) OTHER INFORMATION: /function= "At positions 18, 49,
346 68, 69, and 107, N is C or T."
347     (ix) FEATURE:
348         (A) NAME/KEY: misc_feature
349         (B) LOCATION: 1..121
350         (D) OTHER INFORMATION: /function= "At position 114, N is
351 C, T or A."
353     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
355 TGGTGGNGGG GNAANNANTN NAACCTTCNA AGTCGATGAC GGCAGATTNN GAGTCTNCTC      60
357 CCTTTGGNNG CTCGGGANCC CCNCCACAGG TAATGCTTTT ACGGGGNNCA TCANNTNAAA      120
359 T                                                                           121
362 (2) INFORMATION FOR SEQ ID NO: 13:
364     (i) SEQUENCE CHARACTERISTICS:
365         (A) LENGTH: 121 base pairs
366         (B) TYPE: nucleic acid
367         (C) STRANDEDNESS: single
368         (D) TOPOLOGY: linear
370     (ii) MOLECULE TYPE: DNA (genomic)
372     (iii) HYPOTHETICAL: NO

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VERIFICATION SUMMARY

DATE: 12/18/2001

PATENT APPLICATION: US/09/783,338A

TIME: 16:37:41

Input Set : N:\Crf3\RULE60\09783338A.raw

Output Set: N:\CRF3\12182001\I783338A.raw

L:28 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]

L:29 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]